

REMARKS

Claims 55-57, 59-61, 76-78 and 82-87 currently stand rejected in view of Jiang (6,515,355) under 35 USC 102(e). It is noted that Jiang and the present application are assigned to the same assignee and as such Jiang is not available as a reference under 35 USC 103. As noted below, it is respectfully asserted that Jiang does not render any of the pending claims anticipated under 35 USC 102(e).

Claims 58 and 79-81 were objected to. This Response amends independent claims 55, 59, and 76. Independent claim 84 remains as previously presented. Dependent claim 79 is also amended.

Independent Claims 55 and 59

The Jiang reference provides a PPMSO layer 56 that is formed by patterning a PPMS layer (Jiang Fig. 9A). In the regions at which the PPMS layer is removed solder ball pads 52 are placed. (Jiang Fig. 9A). Jiang does not provide any disclosure that the PPMSO layer 56 is used in any manner of the formation of the solder ball pads 52 other than that the regions where the PPMS was removed provide a space for the pads to be subsequently placed. The Office Action asserts that it is the Examiner's position that the exposed portion of the PPMS layer (portion 56) "is being used as a patterned mask for further processing steps as presently recited." (Office Action, p. 3).

In order to help clarify the use of the term "mask", the amendments to claims 55 and 59 now recite the term "etch mask." Thus, for example, claim 55 now includes: "using said exposed portions of said photo-definable layer as a patterned etch mask for further processing steps." It is respectfully submitted that Jiang provides no disclosure as to using the exposed portions 56 as an etch mask as there is no teaching in Jiang to perform any etching after the formation of the patterned layer 56.

As such, it is respectfully submitted that independent claims 55 and 59 (and those claims depending therefrom) are not anticipated under 35 USC 102 (e) by Jiang and are patentably distinct from Jiang.

Independent Claim 76

As amended claim independent claim 76 includes: “converting said insulative layer to an oxide layer through exposure to an oxygen plasma.” This limitation includes portions of the limitations found in objected to claims 58 and 79. It is respectfully submitted that Jiang provides no disclosure as to converting the exposed portions 56 to an oxide layer through exposure to an oxygen plasma.

As such, it is respectfully submitted that independent claim 76 (and those claims depending therefrom) is not anticipated under 35 USC 102 (e) by Jiang and are patentably distinct from Jiang.

Independent Claim 84

With regard to independent claim 84, it is noted that the claim includes the limitation: “a conductive layer inlaid within said patterned insulative layer.” As shown in Figure 9A of Jiang, it is respectfully asserted that the solder ball pads 52 are not inlaid within the PPMSO layer 56. As illustrated in Figure 9A of Jiang, it can be seen that the solder ball pads are merely placed to one side of the layer 56 and do not touch the layer 56. In this manner the solder ball pads 56 are not inlaid within the patterned insulative layer but merely placed next to the layer 56. It is respectfully submitted that Jiang provides no disclosure to utilize an inlaid conductive layer.

As such, it is respectfully submitted that independent claim 84 (and those claims depending therefrom) is not anticipated under 35 USC 102 (e) by Jiang and are patentably distinct from Jiang.

Conclusion

Applicants respectfully assert that the pending claims are in condition for allowance. Reconsideration of the application is respectfully requested.

The Examiner is invited to contact the undersigned at the phone number indicated below with any questions or comments or to otherwise facilitate expeditious and compact prosecution of the application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Richard D. Egan", is written over a horizontal line.

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